

(No Model.)

J. D. JACKSON.

DISINFECTING ATTACHMENT FOR SEWERS, &c.

No. 248,559.

Patented Oct. 18, 1881.

Fig. 1.

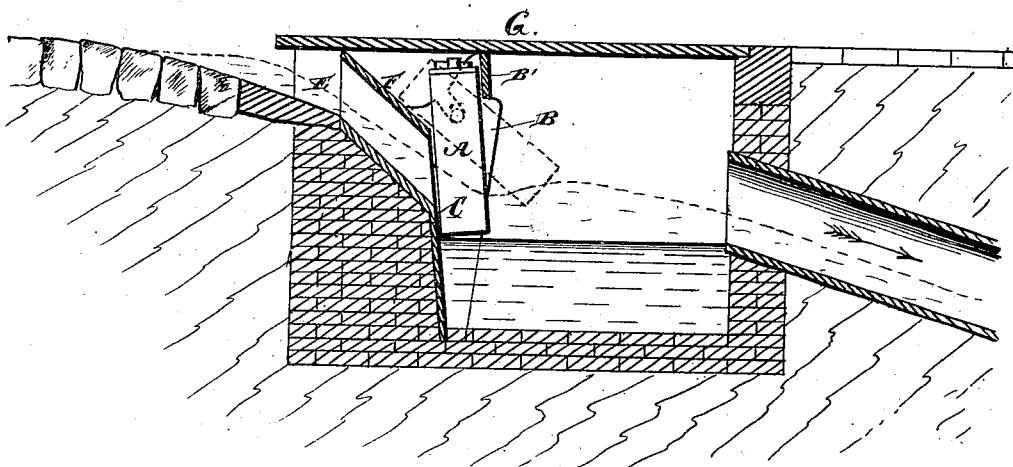


Fig. 3.

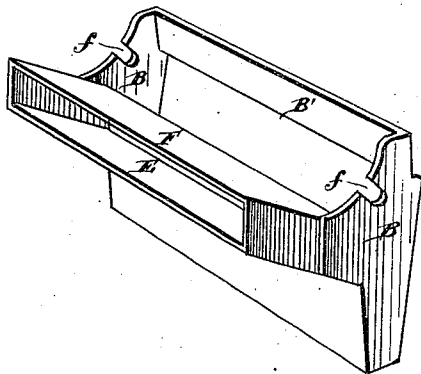


Fig. 2.

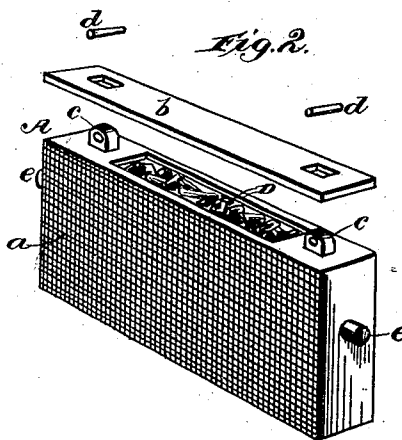


Fig. 4.



Witnesses.

Robert Everett.
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UNITED STATES PATENT OFFICE.

JAMES D. JACKSON, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
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DISINFECTING ATTACHMENT FOR SEWERS, &c.

SPECIFICATION forming part of Letters Patent No. 248,559, dated October 18, 1881.

Application filed August 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. JACKSON, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Disinfecting Attachments for Sewers, Sinks, &c., of which the following is a specification.

My invention relates to disinfecting attachments for sewer-openings, the object being to provide a simple device for absorbing and deodorizing or disinfecting the escaping gases from sewers; and the invention consists in a foraminous box or receptacle for broken charcoal or other disinfectant or deodorizing material, which device is pivoted in suitable bearings at the entrances or exits of sewers or sewer-connections in such a manner as to act as a valve to normally close such openings and absorb the intercepted gases and odors, and yet have sufficient movement to permit the passage of water and other sewage matter, as hereinafter more fully set forth.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a sectional view of a street-sewer catch-basin or trap with my disinfectant attachment in position. Fig. 2 is a perspective view of the foraminous box or cage for holding the disinfectant material; Fig. 3, a perspective view of the frame for supporting the box or cage; and Fig. 4 is a transverse vertical sectional view through the box or cage.

Like letters indicate like parts.

The disinfectant-receptacle A consists of a narrow box or cage having foraminous sides *a*, adapted to permit the passage of air or gas. This cage is filled with broken charcoal or other suitable disinfectant material, which may be readily changed or renewed from time to time, as required. The box A is provided with a cover, *b*, which is slotted at each end to engage with perforated lugs *c c*, the cover being held in place by pins *d d* passing through the lugs. At each end of the box is a pivot, *e*, by which the receptacle is journaled in inclined slots *f f*, formed in the bearing-plates B B at each side of the sewer-opening.

When in position the disinfectant-box A fits snugly between its bearings B B, which may

be connected above by a transverse piece, B', that forms a seat for the upper rear portion of the box when the sewer-opening is closed. In closing the sewer-opening the box A is also seated anteriorly against a shoulder, C, at the lower edge of said opening.

It will thus be seen that the box or cage A acts as a valve to close the mouth of the sewer, while the disinfectant material, D, contained in the box is in such position as to intercept and absorb the deleterious gases and odors that seek an escape through the sewer-opening.

It will also be observed that while the box or cage is hung in such a way as to normally close the sewer-opening it will readily open inward at its lower edge on receiving the slightest pressure of water entering the sewer-mouth or street-inlet E. As the lower edge of the box thus moves backward under the pressure of incoming water its upper portion tilts forward until its anterior face rests on the inclined guard F above the sewer-inlet. In this position, while the sewer-opening is filled with incoming water, the escape of gases above is prevented by the contact of the posterior face of the disinfectant-box with the lower edge of the transverse frame or shoulder B', that extends between the bearings B B. The manner in which the disinfectant-box is arranged with relation to the street-inlet enables it to be readily removed and replaced by simply raising the cap-plate G and lifting the box out or again lowering it in position, as required.

It is obvious that the disinfectant-box may be composed of any suitable materials, or made in any convenient shape to conform to the shape and size of the openings which it is designed to guard.

The invention may be applied not only to the street-inlets of sewers, but also to water-closets, sinks, privies, and ventilating-pipes with only slight modifications.

Where the flow of water is insufficient to operate the device it may be provided with rods or chains arranged to open and close the passages without departing from the spirit of my invention, the essential feature of which consists in applying to sewer openings or passages through which noxious gases and vapors are

exhaled a trap or valve composed of a foraminous receptacle containing a suitable disinfectant material adapted to absorb and destroy such deleterious exhalations.

5 When the disinfectant material is removed, after becoming charged with sewage matter and gases, it may be advantageously employed as a fertilizing agent.

10 By the use of this device sewer-passages may be ventilated without exposure to the dangerous influences of escaping gases.

Having thus described my invention, what I claim is—

A foraminous receptacle for disinfectant ma-

terial, pivoted in suitable bearings, and forming 15 a valve for intercepting and absorbing gases in sewers and sewer-connections, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 20

J. D. JACKSON.

Witnesses:

JAMES L. NORRIS,
L. WINTERS.